THE ART OF COOKING.

A New and Useful Calling for Intellegent Women-The Story of a Pioneer Worker in the Noble Cause-Mrs. D. A. Lincoln and the Work She Has Accomplished.

In her valuable lecture delivered before the woman's congress at the world's fair, Mrs. D. A. Lincoln said: "Cookery is one of the highest and most essential arts, and I say cooking is an art, rather than a science, for science teaches us to know, art to do; but the practice of the art of cookery should be earried on according to certain scientific principles. I hope that I shall see the time when the subject of food, in all its various phases, from the chemistry of its formation to its physiological effects, will be a science by itself and taught in all our schools, being made a leading feature of the curriculum." A beginning has been made in this direction by the introduction of cooking into our public schools. In seven years classes have been successfully conducted in school kitchens, especially adapted for the purpose, in New Haven, Providence, Philadelphia, Pittsburgh and New York, and many other cities have followed in the good work. In Massachusetts the legislators have been considering the question of introducing cooking into the high schools of every city of 20,000 inhabitants.

The teaching of cooking is a comparatively new field for women. Miss New York, were the pioneers, Mrs. Lincoln, of Boston, coming on the field about a year later. At this time there were five leading teachers in the country, including Mrs. Ewing, who taught in the west, and Mrs. Rorer, of Philadelphia. Miss Parloa was the first to start a school of cooking, which was a very expensive private school in Boston. The women's educational association wanted to start a cheaper school and out of this wish grew the Boston cooking school, whose first principal was Mrs. D. A. Lincoln. Mrs. Lincoln says that her only qualifications for that position were that she was an educated woman and a good housekeeper. She took a few lessons of a professional cook and began her work of fitting herself as she went along; she grew up with the school, acting as principal for six years, whereupon she resigned on account of her sister's death. When the school began to grow popular there was a demand for teachers and there were none. Miss Parloa consented to teach a normal class in the school and Mrs. Lincoln became a member of the tage of this training. After Mrs. Lin-



MRS. D. A. LINCOLN.

celn left the Boston cooking school one of her pupils succeeded her as principal and so on down to the present time, which fact led some one to say of Mrs. Lincoln: "She was not only its first principal but its principle," for her works has always been used there, and from this school teachers have gone out all over the country.

In the field of cooking now the demand is for teachers for the public schools, and these teachers receive the regular public school salary; a good teacher can now be fairly certain of obtaining a situation. A high school education is necessary and in some cases a teacher is required to have a normal school training. Cooking is a study that embraces much of a great many sciences-chemistry, physiology, botany, physics and natural history. So little attention has as yet been paid to the science of cooking that there is in this art a wide field for original work. The schools and some of the colleges are beginning to see the needs. of the time, and courses in physiology, sanitary science and hygiene are being established with especial reference to the requirements of teachers of cook-

There are not now enough paying positions in this country for the women who look to teaching as their only means of support. Our young women ought to realize what a splendid opportunity there is for them in this field, for at present it is somewhat difficult to find teachers fully and thoroughly equipped for carrying out an ideal course in cookery. On the importance of this same art, John Ruskin says: "Cookery means carefulness, inventiveness, watchfulness, willingness and rendiness of appliance. It means the economy of our great-grandmothers and the science of modern chemistry. It means much tasting and no wast-

Delicate Orange Cake.

Rub thoroughly to a cream two cups of sugar and two-thirds of a cup of butter, add three eggs beaten separately. Squeeze the juice of two large oranges into a cup, adding enough water to fill it. Stir this into the mixture, together with three and a half cups of flour, two even teaspoonfuls of cream of tartar, one of soda, and a little of the orange rind, grated. Bake in layer tins. For the filling, use one egg yolk and white. Grate a little of the orange rind into this and the juice of helf an orange, adding sugar enough enough to keep the drinker awake

RAISED WAFFLES.

A Delicious Dish Easily Prepared for Breakfast or Luncheon

Scald one and three-quarter cups of milk, add half a teaspoonful of salt and one tablespoonful of butter. When lukewarm add one-quarter of a cake of compressed yeast dissolved in onequarter of a cup of lukewarm water. Add two whole eggs, well beaten, or the volks of three or four. Pour this liquid mixture gradually into one pint of bread flour, beating all the time and continue beating from five to ten minutes. This batter should be mixed late at night and stirred down the first thing in the morning lest it should sour. Be careful not to leave it in too warm a place over night and remember that it will rise a second time rather quickly in the warm kitchen. If no eggs are used this waffle will still be very good, although they are more liable to stick to the waffle iron. The addition of a teaspoonful of sugar to the latter will make them brown quicker if they are desired darker in color. To bake them, heat the waffle iron over a clear fire; it cannot be turned on top of the range. Grease thoroughly with fresh lard, turning the iron that both sides may be equally heated and greased. Pour in sufficient batter to cover the iron and shut the upper side directly down, that the waffle may kept in good shape. Bake about two minutes on each side, remove to a hot plate and serve with sugar and butter, with maple sirup or lemon sauce.

HOUSEHOLD HINTS.

ORANGES and lemons will keep well Parloa, of Boston, and Mrs. Corson, of If hung in a wire net in a cool and airy

A prop of oil and a feather will do away with the creaking in a door or creaking chair.

When milk is used in tumblers wash them first in cold water, afterwards rinse in hot water.

A LITTLE flour dredged over a cake before icing it will keep the icing from spreading and running off. BREAD and cake bowls, or any dishes

in which flour and eggs have been used, are more easily cleaned if placed in cold water after using. It is much better to keep tea and

coffee in glass fruit jars, with tightly rewed tops, than in tin boxes. The flavor is easily spoiled by the vicinity of any articles of pronounced odor, such as cheese or bacon.

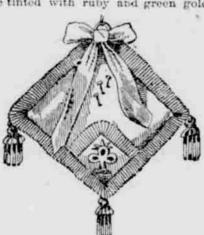
TURNES boiled with their jackets on are of better flavor and less watery. A small lump of sugar added while the vegetable is cooking corrects the bitterness often found in them. If to be served, mash through a colander.

A HANDSOME cover for a piano may be made by using a square of plain class that she might have the advan- satin, with border 12 or 15 inches of gold or silver-wrought satin. A center of pale gray, with a border of still paler gray, or a plain yellow center, with gold-wrought border, is very effective.

PRETTY PINCUSHION.

An Original Design Whose Execution Is Not Very Difficult.

A very original and pretty pineushion is shown in the accompanying illussive of the leather fringe, should tution. measure four and one-half inches square, and be formed of moss-green plush. Upon this, as shown in the sketch, should be appliqued a two-inch square formed of leather work, with the design tooled upon it, the background being stamped over with small discs or squares, and the whole subsequently colored with silver paint. The flower and leaf on the leather should be tinted with ruby and green gold,



PRETTY PANCUSHION.

and the square applied to the plush by a row of very minute machine-stitching. The fringe entirely composed of leather, silvered, should be sut after being folded double, after the fashion of a ham-bone frill, and the little tassels, also of silvered leather, have the tops formed of leather, plaited. Finally, the bow, with long streamer, beneath which the ring for suspension of the pineushion is to be concealed, should be made of moss green moire ribbon.

To Restore Cut Flowers.

Every one should know that hot water will restore cut flowers that are faded, from wearing on the dress or being carried in the hand. Cut half an inch from the end of the stem and put the latter directly into boiling water; the petals will smooth and resume their beauty in a few minutes. Colored blossoms will revive the best, for white flowers are inclined to curl and turn yellow. The blooms will keep fresh after this treatment almost as long as they would have done if freshly gathered.

Japanese Tea Making.

In Japan, where tea making is popularly supposed to be a fine art, it is never intrusted to servants. Either host or hostess prepares the liquid in the presence of the guests. The tea leaves, which are finer than any exported, are scooped up with an ivory shovel, put into a teapot and covered with hot water. The water has scarcely passed through the leaves before the maker begins to pour the lecoction into the cups. It is pale, delicate, fragrant, delicious and strong twelve hours.

An Affecting Tale. Barber-Poor Jim has been sent to

an insane asylum. Victim (in chair)-Who's Jim? "Jim is my twin brother, sir. Jim has long been broodin' over the hard times an' I suppose he finally got

"Hum! Not unlikely." "Yes, he and me has worked side by side for years and we were so alike we couldn't tell each other apart. both brooded a good deal, too. No

money in this business anymore.' "What's the matter with it?" "Prices too low. Unless a customer takes a shampoo or something it doesn't pay to shave or hair-cut. Poor Jim! I caught him trying to cut a customer's throat because he refused a shampoo, and so I had to have the poor fellow locked up. Makes me very melancholy. Sometimes I feel sorry I didn't let him slash all he wanted to. happy look he answered eagerly: It might have saved his reason. Shampoo, sir?"

'Y-e-s, sir."-N. Y. Weekly.

A VICTIM OF HARD TIMES.



"When I last met you, if I am not mistaken, you had an exceedingly heavy beard.

"Just so-just so; had it cut off four months ago and made into a shouldercape for my wife. See?"-Harper's

A Well-Grounded Bellef.

Yabsley-A man of your sense ought to know better than to be so superstitious. What is there in the number thirteen that should make it any unluckier than any other? You can't show a single instance to support your

Mudge-I can't, ch? Where are the people who lived in the thirteenth month's account. century? Every last one of them is, dead .- Indianapolis Journal.

The Necessary Qualification. Superintendent of Insane Asylum-

That man there is the most complete idiot in the institution. He knows absolutely nothing. Railway Official-He is just the man

we have been looking for. I should like to employ him. Superintendent-Employ him! For

Official-To invent new ways of folding our time tables.-Truth.

She Objected.

"Mr. Courty asked me to marry him last night," she blushingly told her mother.

"And what did you tell him?" "I told him to ask you."

"Ask me?" cchoed the startled parent. "Why, Mary, surely you wouldn't have you dear old mother commit exact size of which, exclu- | bigamy, would you?"-Atlanta Consti-

There's No Such Thing.

Maude-We had private theatricals last evening. They went off first rate, only the folks would laugh at the wrong place.

Uncle Henry-There is no such thing, Maude, as laughing in the wrong place in private theatricals.-Boston Transcript.

Contemporary Heraldry.

Annie-What a pretty crest you have on your stationery! Fanny-I can show you my ancestors'

arms in full. Annie-Do give me the address of you ancestors' stationers; I want some

just like them .- Vogue. A Cautious Lover.

"Look here, Gus, why don't you make up to the little girl? Go in and win, man! 'Pon my life, she's a regular pearl."

Gus (sulkily)-That may be, but I can't get along with the mother of pearl.—Texas Siftings.

Virtue Rewarded. Mother-Did you give sister the

larger part of the apple as I told you? Little Johnny-Yes, mamma.

"That is noble. And did you not feel happier for it? "Yes'm. Her part was rotten."-Good News.

Wanted a Legitimate Occupation.

Magistrate-Why did you enter that man's house and rob his safe? Prisoner-Please, y'r honor, I was only tryin' to raise a little money to buy meself a position on the police

fooree!-Puck. Very Dashing.

"That young widow Flison is quite a dashing creature, don't you think?" "I guess you are right. She dashed my hopes most effectually when I asked her to marry me."-Indianapolis Journal.

Dublous.

The Heiress-I don't see why you fell in love with so homely a girl as myself. George. George-Oh, my dear, I know that

you are as good as gold.-Judge. Very Hard Up.

Pattie-They say that young Mr. Dressy basn't a cent to his name. Mattie-Too bad! And he has more money than brains, his teacher says .-Harper's Young People.

He of the Strong Breath.

A poet brought tears to an editor's eyes As he read to him a sonnet: For he biew his breath in the editor's face And his breath had onions on it. -Indianapolis Sentinel.

Accounted For. Mr. McBride-Old man, why is millinery so frightfully expensive? Mr. Gazzem-Because it is billed that way .- Detroit Free Press.

The Jewel of His Office.

Here is a story of a young man which is credited to a Chicago divine: The night he took the "third" the senior warden, at the proper time, gave him the "jewel." Then the worshipful master, with stately tread and solemn face, came down from his seat in the east, and approaching the young can-

"My brother, what is the jewel of your office?"

The young man blushed, and in a hesitating manner stammered out: "The typewriter."

The face of the worshipful master relaxed into a smile, and he said: "Well, that is not exactly the answer I expected, but as you have alluded to typewriters, let me ask you

which one you prefer?" There was no hesitation on the part of the candidate this time. With a

'Oh, the blonde."-Masonic Chroni-

Her French and His. "Marie thinks M. de Franconi is just horrid."

"You know she mastered French in boarding-school and so she spoke to him in his native tongue. And then he shook his head and said: 'Par-don, mademoiselle, I don't understand nuzzing but French.',"-Chicago Record.

The Old, Old Story.

There had been a death in the family, and two of the members were discussing the arrangements.

"I suppose we had better have the funeral on Thursday," said one. "Oh, we can't," replied the other, without thinking: "that is Bridget's day out."-Harper's Bazar.

The Young Wife's Steak. Young Husband-Say, darling, what peculiar flavor this stewed steak

Young Wife (diffidently)-I really cannot account for it. Indeed, in order to take away the bad taste of the onions I scalded them myself in eau de Cologne.-Neckar Zeitung.

It Was Correct.

"Say, you charge me too much for this light," he growled as he paid the electric light company for his last

"Oh, no," smiled the collector, "that's our current price to everyone." -Detroit Free Press.

Hardiy.

Mrs. Brooks-I heard some ladies talking about you yesterday. Mrs. Banks-And did they speak well of me? Mrs. Brooks-It was at the sewing

society.-Truth.

Why He Stald. Mrs. Blinks-Why do you stay at the

elub until two o'clock in the morning? Just tell me that, will you? Mr. Blinks-So you'll be too sleepy to talk very long about it, my dear .-

Not a Gecent Discovery.

"Why do you turn the lamp down low When sitting with your beau at night?" The maid replied, with face aglow: "Why, love is blind and being so Thrives just as well without a right."



Capt. Ricornus - Excuse me: but won't you have a bit of this delicious Miss Nannie Goat-No, thank you!

I never chew gum .- Puck.

We Draw the Line. Oh! we sigh to taste some coffee like our

mothers used to make, And we yearn to get a slice of bread like that they used to bake: But it may be we're ungrateful, yet we're sure we do not care

To feel once more a slipper like our mothers used to wear.

-Nixon Waterman, in Life. His Native Element.

Kitty-Tom is down south this winter, and he just sent me the loveliest little alligator you ever saw. Ada-How are you going to keep

Kitty-I don't know; but I've put him in Florida water until I hear from Tom.

He hung upon a strap, There was a start, and down he sat

Upon a maiden's lap. He rose, she screamed, and shouted out As she her parcels grabbed; "Conductor, please to stop the car, For I believe I'm stabbed. -N. Y. Recorder.

Too Thin.

He was so thin, so very thin-

Ambiguous. He-I'm afraid you don't like to have me dropping in on you for these little chats?

She (earnestly)-Indeed, I'm sure your short calls are perfectly delightful.-Chicago Record.

Will Make No Mistake. Tom-Are you sure you will never forget that it was I who gave you that locket? Miss Bangles-Sure! I'm going to

note it down in my memorandum book. -Chicago Record. He Knew Too Well.

Mrs. Musique (just returned from the opera)-Oh, Jack, it was fine! You don't know what you lost! Mr. Musique (just returned from the elub)—Don't I, though? — Brooklyn

Her Worst.

Life.

Governess-You have misbehaved and I am going to tell your mother. Miss Pert-H'm! who cares? She can't do any more than forgive me .-Hallo.

FARM AND GARDEN.

BARK LICE DESTROYER.

A Predaceous Insect Which Feeds Upor

Harmful Parasites. The insect Erastria scitula belongs to the order or family of Lepidoptera (this order contains all insects having broad, thin and usually bright-colored wings, as butterflies, moths, etc.). This member of the family is a small moth of the night-flying variety. It occurs most commonly in foreign countries, but has lately been found in the western part of the United States. Being of a predaceous (or preying) nature it has come to be a factor in the life histories of numerous shrubs and trees, does upon the coccide (or bark lice) which infest those trees. There are five successive annual generations. The first appearance of the adult occurs about the middle of May; the next generation about a month later. About the middle of July a third and very abundant generation is found; the fourth appears near the end of August, and the last a month later. The first and last generations are generally few in number owing to the searcity of

food at those seasons of the year. The egg-laying period lasts several days, each female producing about one hundred. They are deposited, one at a time, upon leaves or young buds, and are often laid directly upon the backs of bark lice. As soon as hatched the larva enters the bark louse, devouring the internal organs, leaving only the shield-like covering which is more or less thick and hard. As soon as the contents of one bark louse has been devoured the larva abandons it and seeks another. Burying itself in a new victim is but the work of a few minutes. When about ten days old the larva, while under the covering or shell of one of its victims, begins the construction of a silken web about itself, using the bark louse shell as a frame-



BARK LICE DESTROYER. larva from below. h same from above, va in case. d, case of full-grown larva o, pupa. f. moth.

work. Openings are left for the head rying its artificial case and devoucing several victims each day. The fullgrown larva is much larger than a bark louse and as it grows its case is built out with silk and fragments of its victims.

When full-grown it searches for a favorable position in which to fasten its case (usually selecting the angle formed by two branches or a large crevice in the bark), prepares its cocoon and transforms to a pupa. Before transforming, however, the larvæ prepares a point of exit for the future moth. Upon emerging from the cocoon the moth fails to the ground. Three or four minutes later its wings expand and it flies up among the branches. During daylight it remains motionless, holding its wings close to its body. The possibility of transporting the insects from place to place has received attention. It is found that the half-grown larve will live eight days without nourishment. Nor will they destroy each other as is the case with most carnivorous larvae. Placed in bottles they can be transported long distances, and at the end of the journey need only to be placed upon plants or trees infested with bark The cocoons containing fullgrown larvæ will also stand a journey of eight or ten days. In winter the cocoons or eggs can be sent great distances, and there is no reason why they cannot be acclimated in all countries where the injurious bark lice prevail. The accompanying illustrations are reengraved from Insect Life, issued by the United States department of agriculture, etomological section.

KILLING THE BUGS.

The Clever Machine Devised by a Nev York Horticulturist.

Mr. S. D. Willard, of Geneva, N. Y., describes in American Gardening the "bug machine" which is used on his place in killing the curculio. It consists of an inverted umbrella-like contrivance made of sheeting, having a diameter of nine to eleven feet. This is mounted on a two-wheeled wheelbarrow, and it having a slit in one side ending at the inverted apex the man who operates it can readily push it under a tree until the trunk is in the center. Then, with a long, padded stick, the operator strikes the limbs a quick blow and the curculios fall upon the sheet, and the wheelbarrow is moved on to the next tree. Just under the center is a tin drawer into which



the insects are brushed, and at the end of the rows the box is removed.

At point X two of the arms come near together, leaving a space, however, wide enough to pass the body of the tree between. The dotted line under figure B represents the body of the tree when the machine is set for jarring. The distance across the sheet, for instance, from E to X, is from nine to eleven feet; in the machine here shown, nine feet. A represents the wooden arms that support the sheet. all diverging to one center midway between the wheels, beneath which is a tin drawer that is pulled out to D, and the bugs dumped into a firebox and burned.

PLANTS come out stronger in spring when they are not exposed to the full life is now merged.-Toledo Sunday blasts of winter.

ROADS IN EUROPE.

The Three Varieties of Material Used Their Construction.

The materials out of which reads s made in Europe may be classed unde three varieties-trap or basalt, gran ites, including some of the harder se mentary rocks, and limestones. Wher the first two are easily obtainable the are exclusively used, trap being pre ferred to the granites. In many r gions limestone, being the only mate rial at hand, has to be employed Trap, having the densest and hardes structure, makes the most durable road. Being more resistant to crusts ing force and least affected by frost, is is particularly adapted to roads whiel are used for heavy teaming, outwear particularly the olives, feeding as it ing granite for this purpose. The harder rocks of the granite series make very serviceable roads even to teaming, and excellent ones for driving One of the smoothest and most agrees ble roads I have ever ridden over was made of a hard-baked flesh-colored made of a hard-baked, flesh-colored argillaceous rock, the texture of which resembled that of a fine-grained brick

Limestone roads, at their best, are the finest of all for driving and riding purposes. Not so hard as the trap and granite roads, they possess a certain degree of elasticity, in virtue of which the carriage or bicycle rolls over then with less jar and with a peculiar east of motion which exerts a most pleasing effect, the nearest approach to which is that experienced in riding on a good asphalt pavement. This elasticity is most marked at that period after a rair when the surface has set thoroughly.0 but has not become dry enough to be rubbed into dust. Unfortunately, owing to the softness of the material, limestone roads deteriorate rapily and require constant care to keep them int good order. They also soften easily under the action of frost and water, so that in the spring and during rainy seasons they are liable to become,

One of the finest, if not the finest, example of a first-class limestone highway to be found in Europe is that rung ning through the Ampezzo valley from Toblach to Perarolo, a distance of sixty-nine kilometers. Well constructed, well cared for, always smooth, never heavy, leading through some of the wildest and most remarkable of the Dolomite scenery, winding along the side of the Durensece, under the precipitous rocky walls of Cristallo Crodar Rossa, Sorapis and Antelao, it intro-P duces the traveler to a world of beauty, and grandeur, the equal to which isi difficult to find.

Material for repairs is kept constantly on hand at short intervals on the and feet, and it now crawls about car- sides of many highways, particularly in Germany. The rock is carted to the desired spot in pieces twelve to eighteen inches in diameter and there_ are broken up by the road-repairers into fragments one and a-half to two inches in diameter, and piled in little

heaps ready for use. The best roads have only gravel enough mingled with and covering the pupper layer of small stones to bind these firmly together and make a smooth surface. More than this amount serves to make dust and mud and to impair the efficiency of the road .-Dresden (Germany) Letter in N.Y. Post.

FOR THE ROADSIDE.

Directions for Putting Up an Iron Pipe

Watering Trough. Streams from near-by elevations frequently cross or run parallel with highways, from which elevations pipes can be laid to the side of the roadbed. This gives a head of water that will not only cause it to rise in a trough, so that a horse may be watered without unchecking-a great convenience-but will also afford such a movement of the water, if the inlet is rightly ar-



IBON PIPE WATERING TROUGH.

over the cutire surface, even in extremely cold weather. An excellent roadside watering trough can be made by taking a section of iron sewer or water pipe, two feet or more in diameter. This, of course, will have no bottom, and one must be made in the foundation that is provided, which should be of rocks, gravel, sand and, if necessary, cement. A supply pipe and a waste pipe must enter the trough through this foundation, the supply pipe being carried up on one side of the trough nearly to the top, and its upper end bent at a right angle, so that the inflowing water may form a constantly flowing current around the circular inclosure. When this iron trough has been placed in position on the foundation prepared, the space which it incloses at its base may be cemented, after which fine, clean sand should be filled in for six or more inches. A sufficiently tight bottom may perhaps be made by tamping in a foot or more of sand. The greater the force with which water enters such a trough the stronger will be the circular current within, and the less likelihood will there be that the surface will freeze over. - American Agriculturist.

Good Roads Mean Much.

Given good roads, and the general use of the wheel among farmer boys follows. And with that must come the daily mail, the daily paper, and the general diffusion of knowledge and information, which shall lift the farmer boy above the petty gossip and the dwarfing surroundings in which his Journal